



Land Use and Siting Panel  
Discussion Paper

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## **ISSUE OVERVIEW<sup>1</sup>**

Siting local renewable energy projects and siting the land use permits needed to allow them to build and operate in California communities is a challenge for many local governments at a time when budgets and staff are significantly reduced. Nevertheless, efforts are underway to address the permitting challenges in a responsible and timely manner. There is recognition that statewide consistency in siting and permitting these projects would be beneficial; however, this is counter-balanced by the desire to preserve local control and account for differences in jurisdictions. There is also recognition that permitting is faster and easier if project sites are selected carefully to avoid valuable resources, such as prime agricultural land and habitat for endangered or protected wildlife. This is counter-balanced by the fact that costs are reduced when renewable energy is sited close to locations for connection to the grid, and on cheap land. There is interest in further minimizing impacts of renewable energy development by using “brownfields” sites, such as closed landfills, Superfund sites, and mining sites. Continuing efforts to identify these sites and evaluate their potential for renewable energy development are underway.

## **IMPORTANT QUESTIONS TO PURSUE**

### ***What Criteria Should We Use to Locate Local Renewable Energy?***

**Existing Buildings:** To minimize environmental impacts, the first priority is placing renewable energy systems on the roof existing buildings and in parking lots. Estimates of available rooftop area in the state are huge, and could go far towards contributing to the 12,000 MW distributed generation goal. The Solar Rights Act (Govt. Code 65850.5) streamlines government review of rooftop solar projects, by specifying that approval must be ministerial, and conditions may only be imposed if necessary to protect public

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<sup>1</sup> The author, Sandy Goldberg, apologizes for any errors in this paper.

health or safety. No conditions may be imposed to address aesthetic impacts. [There have been questions about the scope of the Solar Rights Act, in particular whether it applies to ground-mounted solar systems that provide for the on-site electric load, or to large warehouse rooftop solar systems that sell all the power to the grid.]

#### Land That is Not Valuable Habitat, Open Space or Prime Agricultural Land:

After buildings and parking lots, there should be an effort to site renewable energy on land that is not valuable habitat, open space, or farmland. In particular, land that is not available for other uses, such as the right-of-way along highways, and “brownfields” sites may be good locations. However, these sites may also present some unique challenges. A brownfields site may have areas where a land use covenant or deed restriction prevents soil disturbance. Or, if a cleanup is not complete, or there are no recorded provisions, the review and approval of the regulatory agencies involved with the cleanup or closure of the site may be required.

Locating a project on land that is not covered by a Williamson Act contract restricting the property to agriculture or open space uses can avoid legal hurdles and costs. Costs may include mitigation of adverse impacts, or Williamson Act contract cancellation fees (12.5% of FMV of the property) that apply (if the cancellation criteria are met). In general, renewable energy development in agricultural preserves must be consistent with the “compatibility principles” in Government Code section 51238.1. If the site is in an agricultural preserve or under a Williamson Act contract, the chances for approval of renewable energy development are greater if the land is not “prime” agricultural land, irrigation water is not available, and/or high salinity or selenium concentrations in the soil, or other factors, make agriculture uneconomical. A bill is pending (Wolk – SB 618) that proposes an alternative “solar easement” process for allowing renewable energy development on certain non-prime, degraded land without cancellation fees.

#### Siting Near Load Centers:

Local renewable energy generation contributes the most to electric system efficiency when it is located where electricity capacity to meet existing demand is constrained. CA ISO identifies these areas as Local Capacity Requirement Areas (<http://www.caiso.com/18a3/18a3d40d1d990.html>) and they are shown on maps at: <http://www.energy.ca.gov/maps/index.html>, under “Local Reliability Areas with Transmission Lines and Substations for 2011.” The PUC’s Feed-In-Tariff decision for Combined Heat and Power provides a 10% “locational benefit” payment for generation in Local Capacity Requirement Areas, and this may also be adopted for the renewable Feed-in-Tariff under SB 32 (Pub. Util. Code §399.20). Costs are also less if a system can connect to the transmission or distribution system without upgrades to the grid.

SDG&E has recently posted online the capacity of its distribution system to add new generation at various locations. (<http://www.sdge.com/builderservices/dgmap/>, Go to Additional Documents, “Feeder Capacity table” and “Substation Capacity table.”

For its Feed-In-Tariff solicitation in 2010, SMUD provided an Interconnection Map giving the capacity to connect generation at all local substations.

(<http://www.smud.org/en/community-environment/Solar-renewables/Documents/InterconnectionMap.pdf>)

### *How Are Local Governments and Planners Approaching the Challenges?*

#### Statewide Model County Ordinance:

The California County Planning Directors Association (CCPDA) is leading an effort to develop a Model Solar Energy Facility (SEF) Ordinance for CA Counties. The goal of the Model Ordinance is to incentivize the CA solar industry to rapidly apply for and receive land use entitlements and building permits for SEFs. There are over 60 people assisting this effort, including county planners, state government, the solar industry, and farmland and environmental preservation groups. Issues that the group has debated and attempted to resolve include:

1. Creating a Tiered Permitting system and agreeing on the threshold acreage limits for each tier and how they relate to Prime Farmland and Williamson Act contracted lands.
2. Creating a Tier that allows for an Accessory Use entitlement (Tier 2) via an Administrative Permit for the placement of up to 5 acres of SEF on a minimum of 10 acres of Farmland where the use is intended to assist an existing or proposed agricultural use. This Tier is exempt from CEQA.
3. Considering the strategy of using a General Plan Overlay as a means to facilitate the locating and permitting of SEFs. This will require funding to update General Plans.
4. Encouraging the placement of SEFs in areas not under a Williamson Act contracts, Prime Farmland, or environmentally sensitive lands by streamlining the permit process under this scenario.
5. Where the SEFs are located in Prime Farmland, should there be mitigation for the loss of Prime Farmland and if so at what ratio (1:1)?
6. Developing a clear definition where SEFs are not allowed: currently, we are reviewing and evaluating floodways, wetlands, Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Williamson Act contracted lands (either requires cancellation or possibly a modification to State or Local

Williamson Act rules to make a determination that it is a compatible use), habitat of special status species and lands subject to various easements.

County Policies for Renewable Development on Agricultural Land:

Tulare County: Resolution 2010-0717 sets forth criteria for energy development on agricultural zoned lands and Williamson Act contract lands. It includes factors to consider (such as proximity to the electric grid or a substation, and availability of water) and provides that energy development may be permitted subject to conditions on non-prime farmland; for lands under Williamson Act contract, the County will also review to insure compatibility. Based on the statement in Resolution No. 89-1275 (Uniform Rules for Agricultural Preserves) that construction of electric, water, and community utility facilities are determined to be compatible uses, the County has found that renewable energy projects are compatible uses on non-prime farmland when water is not available for irrigation and the site is located near a connection to the electric grid.

Kern County: Commercial energy generation has not been considered a “compatible use” in an agricultural preserve. Accordingly, applicants for commercial renewable energy development must seek cancellation of a Williamson Act contract. The County has authorized cancellation where the property is not prime ag land, and with a condition requiring 1:1 mitigation for any loss of prime farmland that has been farmed.

Fresno County: In May 2011, County Supervisors adopted Solar Facility Guidelines, and authorized the County Dept. of Public Works and Planning to require specific supplemental information with any application for a solar energy facility in an agricultural area or a petition to cancel a Williamson Act contract. The requirements are set forth in the handout, “Solar Electrical Generation Facility Supplemental Information.”

San Bernardino County: Development Code, Ch. 84.29, Renewable Energy Generation Facilities, specifies development standards and permit procedures; authorizes facilities in Resource Conservation, Agriculture, Floodway and Rural Living Zoning Districts. ([http://www1.sbcounty.gov/landuseservices/DevCode/2007\\_Development\\_Code\\_10-09-25.pdf](http://www1.sbcounty.gov/landuseservices/DevCode/2007_Development_Code_10-09-25.pdf))

San Diego County: See, Amendment to Ordinance Related to Small, Medium and Large Wind Turbine Systems (No. 10073), [http://www.co.san-diego.ca.us/dplu/docs/POD\\_10-007\\_Final\\_Ordinance.pdf](http://www.co.san-diego.ca.us/dplu/docs/POD_10-007_Final_Ordinance.pdf), and Solar Energy Ordinance (No. 10072), [http://www.sdcounty.ca.gov/dplu/docs/POD\\_09-006\\_Final\\_Ordinance.pdf](http://www.sdcounty.ca.gov/dplu/docs/POD_09-006_Final_Ordinance.pdf).

### Combining Districts:

Kern County ordinances include a Wind Energy (WE) Combining District (Chapter 19.64) that sets forth requirements for wind energy development (<http://library.municode.com/index.aspx?clientId=16251&stateID=5&statename=California>). This ordinance does not map areas where wind energy is allowed, but specifies the zoning districts and minimum lot sizes where it is allowed. In those areas, both the regulations of the base district and the WE combining district apply. San Luis Obispo County has a combining district ordinance for electric generation facilities. (SLO County, Ch. 22.14.040, Energy and Extractive Resource Area (EX) at: <http://www.slocounty.ca.gov/Assets/PL/Land+Use+Ordinances/Title+22+-++Land+Use+Ordinance/01+-+Title+22+-+Land+Use+Ordinance+-+Article+1+through+8.pdf>). Sonoma County is in the process of developing a renewable energy combining district ordinance.

### Efforts to Identify Areas For Renewable Energy Development:

Inyo County: Inyo County adopted a “General Plan Amendment – Renewable Solar and Wind Energy” that identifies “zones” where renewable energy development is authorized. (<http://inyoplanning.org/RenewableNewPage.htm>). The Center for Biological Diversity and Sierra Club filed a lawsuit asserting that the County did not adequately evaluate impacts on rare, threatened, and endangered species from the amendment, and asserting that an EIR is required.

Antelope Valley: Los Angeles County proposes to identify lands in the Antelope Valley Area Plan with 3 levels of priority for renewable development. A Draft Renewable Energy Production Priority Map is available at: <http://planning.lacounty.gov/tnc>. The map takes into account: Competitive Renewable Energy Zones; county-designated Significant Ecological Areas; habitat for Swainson’s hawk, Mojave ground squirrel and/or Desert tortoise; and the Edwards Air Force Base Impact Area. Areas would have various levels of priority and review requirements, but it appears that renewable energy development in other areas would not be prohibited.

City of Richmond: Richmond is working with US EPA and the National Renewable Energy Laboratory (NREL)’s Technical Assistance Program (TAP) to develop a decision matrix to identify priority brownfields sites for renewable energy development.

*What are the models/how do we assist diffusion of models?*

The available models include the measures discussed above, but this is not an exhaustive list. Each one represents a somewhat different approach, and there are likely other models that should be considered.

The CCPDA will distribute the working group's final Draft Model SEF Ordinance to the Executive Committee and all the members (58 county Planning Directors). The Committee Chair, Tim Snellings (Director of Development Services, Butte County), will explain the process and intent of the Draft Model SEF Ordinance, and the CCPDA President will encourage the members to utilize and implement it, or use it to create their own ordinance. The Draft Model Ordinance will be presented and discussed at CCPDA's annual conference in February 2012 and then will be finalized and distributed widely, to local and state officials and other stakeholders (including cities).

Grants and other funding to local governments to develop and adopt renewable energy permitting ordinances and to identify and map priority areas for renewable energy development would be helpful.

#### *What are the incentives for adopting best practices?*

Siting: Incentives for siting solar energy generation on rooftops include the limit on aesthetic considerations and ministerial approval (i.e., no CEQA review). There are no direct financial incentives for siting on brownfields, disturbed land, or land not covered by the Williamson Act. Federal grants may be available to local governments to identify and evaluate the potential of brownfields sites for renewable energy development.

Permitting: For both project applicants and local governments, incentives include:

- having a predictable process that applicants understand
- completing permitting in a timely and efficient manner (applicants may have a contract obligation to begin providing electricity by a certain date)
- attracting new renewable energy development that provides jobs that contribute to the local economy
- directing the development to areas where resource impacts are minimized

#### *What are the opportunities and challenges for brownfields development?*



Brownfields: US EPA's Re-Power America Project focuses on facilitating use of brownfields for renewable energy. EPA has published maps of brownfields sites in CA ([http://www.epa.gov/oswercpa/maps\\_data\\_ca.htm](http://www.epa.gov/oswercpa/maps_data_ca.htm)). The Re-Power America maps focus on larger sites, but include 76 sites of 40-100 acres in California. State agencies in California (Department of Toxic Substances Control; regional water quality control boards) that have direct involvement with cleanup of contaminated sites, mining sites and closed landfills may be able to further narrow the universe of brownfield sites with potential for renewable energy. These sites could be overlaid with the maps of the electric transmission and distribution system, and also with the Local Capacity Requirement Areas, where local renewable energy is the most valuable.

There may be opportunities to expand on-site generation of renewable energy to supply power needed for brownfields cleanups. A 6 MW solar system at the Aerojet-General Superfund Site in Rancho Cordova (a partnership with SMUD) provides electricity to extract and treat 20 million gallons of groundwater / day ([http://www.clu-in.org/greenremediation/subtab\\_d31.cfm](http://www.clu-in.org/greenremediation/subtab_d31.cfm)). There may also be opportunities for solar development on mining sites, both to provide onsite electricity and for commercial electricity sales. Amonix is a solar company with headquarters in California that manufactures and installs concentrated photovoltaic systems. It has completed a solar installation at an asphalt and concrete aggregate facility in Indio, CA that will supply 75% of the electricity needed onsite.

As noted above, U.S. EPA and NREL, through a grant program, are working with the City of Richmond to evaluate brownfields sites in the city and identify priority sites for renewable energy development. This type of assistance may be available to other jurisdictions.

Caltrans Solar Highway: The Oregon Department of Transportation (ODOT), in partnership with Portland General Electric (PGE), developed a solar highway project in 2008, located at the I-5 and I-205 interchange. This project benefitted from Oregon's 50% Business Energy Tax Credit for investments in renewable energy (as well as the federal ITC). In May 2011, ODOT received County approval for its second solar highway project (1.9 MW on 6.7 acres) at a rest area, also in partnership with PGE.

Two solar highway projects are proposed in California. One is the SMUD Solar Highway (1.5 MW) at two locations in the right-of-way of Hwy. 50 in Sacramento and Rancho Cordova. SMUD received a grant from US DOE for the project, which will evaluate both fixed panels and dual-axis tracking solar PV systems. A Mitigated Negative Declaration was prepared, and will be considered at the SMUD Board's July 2011 hearing. SMUD and Caltrans are negotiating the terms of a lease agreement that must be approved by the CA Transportation Commission. This could serve as a model

for future projects. The other project is the Republic Cloverleaf Solar Highway (15 MW), located at 7 highway interchanges in Santa Clara County. Issues to consider regarding locations for a solar highway project include: ensuring that the long-range transportation plan does not propose road widening; considering the safety / accident rate to ensure that there is minimal potential that a safety improvement project will be proposed; and availability of access from a city street. Caltrans is developing criteria for evaluating proposals for renewable energy development on its property, including right-of-ways, park and ride lots, rest areas, and other excess property. A consultant for Caltrans is also evaluating and mapping property that Caltrans could lease for renewable energy development.

### *What are the challenges for complying with CEQA?*

#### Cumulative Impacts:

Kern County has received numerous applications for small commercial solar energy facilities at different locations from separate LLCs that were created by one project developer, and are under the control of one project developer. In some cases, the County determined that the separate facilities have potential significant environmental impacts, and potential significant cumulative environmental impacts, that must be analyzed together in one EIR. For example, one EIR is being prepared for ten solar facilities proposed at various locations in the southeastern quarter of the County (which is non-attainment for ozone and PM10). (See, RE Distributed Solar Project, at <http://www.co.kern.ca.us/planning/noticeprep.asp>) The generating capacity of the proposed facilities include: 6 at 20MW; 1 at 10MW; 2 at 5MW and one at 74MW, for total capacity of 214MW. None of the sites are in a Williamson Act contract, but 2 of the sites (totaling about 315 acres out of a total of 1,709 acres) are in an agricultural preserve and include Prime Farmland. The EIR will address numerous potentially significant impacts, including that the project may result in a cumulatively considerable net increase of criteria pollutants, and may cause or contribute substantially to an existing or projected air quality violation.

One problem that has arisen is the PUC rules for utility contracts to purchase distributed renewable energy have deadlines to start delivering electricity that may not allow enough time to complete CEQA review and then construct the project. A limited CEQA exemption or streamlined process for distributed generation projects located in certain areas (where resource conflicts are avoided) might help to address this.

CEQA Review by the Public Utilities Commission (PUC): Some local renewable projects include interconnection equipment that will become the property of the electric utility. For the investor-owned utilities, this triggers the need for PUC approval of these



equipment upgrades. In doing its review, the PUC will rely on the CEQA analysis conducted by the local government, if it determines that the local review was adequate. Therefore, local governments should designate the PUC as a responsible agency that receives all CEQA notices for the project, so the PUC has the opportunity to participate.